



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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July 17, 2000

TO: Minerals File

FROM: Doug Jensen, Senior Reclamation Specialist *D. Jensen*

RE: Site Inspection, North Lily Mining Company, Tintic Project, M/023/007, Juab County, Utah

Date of Inspection: July 11, 2000
Time of Inspection: 9:30 A.M.
Conditions: Warm and Windy
Participants: Bob Bayer, JBR Consultants, Walt Schubert & Elwin Ewell, North Lily Employees, Beth Wondimu DWQ, Doug Jensen, DOGM

Purpose of Inspection: Monthly Site Progress Visit

Beth and I arrived ~ 9:30 am, Elwin was at the site when we arrived. Because none of the other people had arrived on the site, Beth and I walked some of the site to access any changes that had taken place in the past month.

First we inspected the patching work that had taken place on the pregnant solution pond. This work had been completed during the weekend of July 1st by Rainy Day Products. The patches were placed and tested using both the vacuum box and the air lance testing method. Rainy Day is certified to perform both of these tests. All the patches placed in the preg pond were tested, although no documentation has been received by either DWQ or DOGM. Patches placed by Rainy Day looked very good. New material had been used for most of the patches, although it appeared that some older material had been used in some areas (although the use of the older material did not affect the quality of the patching effort). Approximately ten to twelve patches have been placed around the perimeter of the pond.

We next inspected the solution channel area, to check the condition of the exposed liner. There are seven or eight visible hole ranging from six inches to more than a foot in size. These holes are not down where the solution is presently flowing, but will have to be patched before resloping of the pad is initiated.

Ray Gottling and Phil LaHoux of Barneys Canyon (Kennecott) arrived at the site. I had arranged for them to meet us on site to for the purpose of discussing the possibility of Kennecott accepting the cyanide and caustic soda presently on the site. Kennecott agreed to accept the cyanide if North Lily would arrange transportation. The label on the cyanide barrels were deteriorated to the point that they were

illegible, I asked if Kennecott could furnish us with shipping labels for the barrels. Because the caustic soda is presently stored in an open tank, Kennecott wanted a sample to check to see if any contaminants have been placed into the tank. If there are no problems with the material, they will also take the caustic if transportation is arranged.

Bob Bayer arrived on the site after the Kennecott personnel had left the site. I told him of the arrangements that we had made and asked him to arrange for transportation. Bob stated that JBR had a hazardous waste handling licence and he had contacts that could transport the materials. He stated that UDOT would require a profile of the contents of the caustic tank. The condition of the cyanide barrels would be checked to see if shipping containers would be needed before they left the site.

The first stop on the tour was the area of the preg pond leak detection. Elwin stated that he was pumping the sump on a weekly basis. The last time he pumped the sump, on July 5th, he had removed 270 gallons. Elwin has been pumping between 200 and 270 gallons per week from the leak detection sump since June 13, therefore, I believe that this indicates that the sump is functional. Elwin gave copies of his pumping logs, dated from June 13th to date, to Beth and I.

The level of solution in the preg pond is down from our last visit. I would guess that there is only about ~100,000 gallons in the pond. The present level of solution in the pond must be maintained in order to assure that the pump will have adequate head to continue to operate. This level is being maintained by regulating the flow of water to the heap. The pump rate is down from the 190 gpm being pumped last month to 100 gpm (began spraying at this rate July 3). This rate will continue to decline as evaporation reduces the solution inventory at the site. The flow from the heap has dropped to approximately 45 to 50 gpm. This is approximated because the weir is not in this place at this time. Bob indicated that the company constructing the weir had some problems but it should arrive on the site next week.

We next visited the ditch area to discuss the placement of the solution underdrain system. I suggested that Elwin could start to patch the holes presently visible in the ditch area. I felt that Elwin could perform this work because the ditches were not a part of the DWQ order that patching work needed to be certified. Bob stated that he would not authorize this work until he was told by DWQ that my interpretation of their order was correct. We decided to wait on the patching until after the July 13 tele-conference with all parties.

I suggested that a hole be opened up in the ditch liner near the preg pond to access how much of the solution presently being pumped from the preg sump is coming from leaks in the heap area. Bob stated that he would not authorize this work until the patching question is addressed by DWQ. I feel that the amount of solution coming from the heap needs to be quantified. This is because, with the low level of solution in the preg pond, leakage from the pond should not be at the present level (unless there's a hole that we are not aware of).

We then walked the West side of the pad along the ditches. I requested that the ends of the ADS pipe, which is a part of the pad underdrain system, be cleaned out. When the ADS pipe is placed in

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the ditch these pad under-drain pipes will drain into it. This will help to make sure we are not holding water in the heap that we could be putting into the system and evaporating.

We walked the pad to check the sprays. The number of sprays operating and the amount of mist being produced was reduced from the last visit. This is due to the lower pressure and reduction in flow to the heap (from 190gpm on June 6th to the present 100 gpm).

Beth and I walked around the bottom of the overflow pond to check the condition of the secondary liner (primary liner is already in the bottom of the pond). Overall the liner looks very good. There were several small patches, apparently placed by Rain Tree, but we could not find any other holes. The bottom of the pond is dry and in walking over the entire area, we could not find any soft spots. Soft spots are usually an indication of leaking solution.

Elwin informed us that in addition to the chemicals that Kennecott had looked at there was a barrel of muriatic acid. He had not mentioned this at the time that Kennecott was on site, but I said that I would check to see if Kennecott would take this acid also.

Beth informed Bob that we would need a letter from North Lily requesting an extension for use of the overflow pond past July 30.

We also discussed having JBR arrange for transportation of the chemicals to Kennecott. He said that he would check with his transporters to get bids. He also stated that he would wait for the analysis from the caustic tank before arranging for removal. The analysis will be necessary to complete the bill-of-lading for transport.

We left the site around 12:30 and returned to Salt Lake.

jb
cc: Steve Flechner, North Lily Mining Co
Beth Wondimu, DWQ
Mary Ann Wright, DOGM
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